

## TO WHOM IT MAY CONCERN

I am writing to express my interest in the NHMRC strategic review; at this early stage of the process, I offer some high level strategic thoughts from an individual perspective. I have had input into other organisational submissions, however as an active clinician with a leadership role in the health sector, a clinical, health service and public health researcher/NHMRC fellow, a member of NHMRC Health Care Committee and Interim chair of the NHMRC Translation Faculty and as a Board member of an NGO with active affiliations with the not for profit sector, I offer some individual insights for your consideration.

I will not specifically address each of the matters for review, as these are dealt with in the organisation submissions. However of the matters for review, my comments are perhaps most relevant to the challenges of funding and supporting research in Australia. This includes from governments at all levels, industry, non-government organisations and philanthropy and also the opportunity to engage and leverage additional support for research through other sectors. These comments are also relevant to the opportunities to improve collaboration between education, research, clinical and other sectors to support the translation of research into improved health policies and practices, to the broader health reform agenda and to the integration needed between not only health and medical research, but all other relevant sectors (especially government) that are relevant to health and related economic burden.

Our key health challenges have evolved in the past decades. Non communicable diseases are our major threats and obesity is now the primary risk factor for disease in Australia. Obesity is linked directly to our lifestyle related behaviours, which in turn are underpinned by a large range of determinants, often sitting outside the health sector. Overall, obesity, lifestyle related behaviours and related diseases present a so called “wicked” health problem and demand a paradigm shift in our approach to medical research.

Our conventional approach to medical research, which has often focused on development of new medications to deal with specific diseases, will not resolve non communicable disease alone. Indeed such reductionist, focused thinking fails to recognise the complex wicked

public health challenges that present our greatest health threat. As we know from Australia and other countries, wicked problems require co-ordinated, multi faceted, cross sector responses. Cultural change is needed to engage integration of the sectors, vital for improving health outcomes and reducing health costs. This cultural change and cross sector integration is directly relevant to this strategic review of health and medical research in Australia.

Opportunities for consideration that may assist in this space include:

- **Leadership** by peak bodies and government to drive cultural change and force integration
- **Establishing enabling structures** and strategies to drive cultural change and integrate across sectors
- **Initiatives by the NHMRC** (see below) to enable cultural change
  - Academic Health Sciences Centres as partnerships between the health sector and researchers
  - Practitioner fellowships to engage active health care providers in research and translation
  - TRIP translation fellowship
  - Establishment of the National Faculty of Translation
  - NHMRC engagement with the Cochrane Centre
  - NICS oversight role of evidence based guidelines
  - NHMRC partnerships centres: This latter initiative is perhaps the most innovative and inspirational leadership activity to emanate from the NHMRC in this area. It is a brave and strategic move to forcibly engage the end users and the researchers by providing an enabling structure for cultural change to allow all to “learn” how to better develop the cross sector approaches so vital to address future health and research challenges. It has already successfully leveraged funding from other sources outside the NHMRC and engaged many end users in the discussion and the space they have not traditionally engaged in.
  - NHMRC are to be congratulated for these strategies, yet there are many other opportunities that will present themselves to work in innovative ways including encouraging leadership and building capacity in cross sector partnerships, such as through the Faculty of Translation.
- **Engagement of end users** who are effectively the market place for research. It is fundamental that the end users from consumers (the tax payers), government,

philanthropy, NGO's and industry are engaged as the "client" in research. Education, marketing and up-skilling is needed not only in the research community but also in the end users of research. End users need to understand, value, be guided by and not threatened by research, data and knowledge. Funding will flow where there is demand, but demand from clients will only come if end users are aware, engaged in and understand the value and role of research.

- **Engagement of researchers:** Reciprocally, researchers who have traditionally independently driven the research agenda, often with the best of intentions, need to be engaged, educated and led to value the role of the end users or client in research. Research seen in the context of a process such as the "Knowledge to action" cycle described below, are more likely to address key gaps and priorities, generate more practical feasible outcomes and translate them into practice to deliver better health outcomes.

### **The need for a systems approach in the future of medical research**

This is a need for a paradigm shift in medical research. Australian investment in knowledge generation through research is substantial, yet alone it is not enough to realise health benefits and yield improved health outcomes. Research or knowledge generation is but a step in a much broader process and yet there are currently significant barriers and few enablers to this.

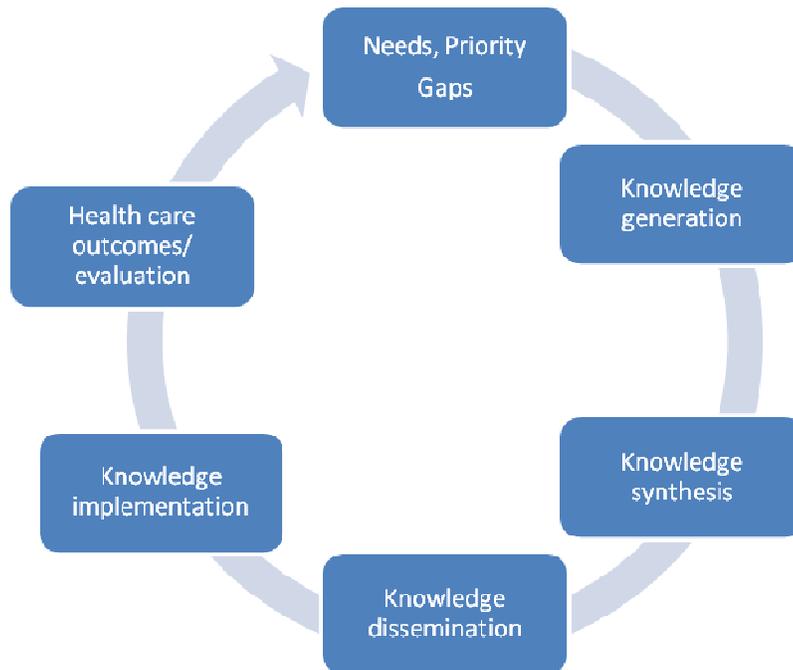
Traditional research often fails to permeate to the coalface and change policy and practice. Publically funded investment in knowledge generation should be needs driven, informed by broad stakeholder engagement and supported by effective evidence synthesis, dissemination and implementation research/strategies to increase penetration of evidence into practice and yield health benefits. To do this, it needs to be part of an active system or process.

Critical to this is engagement by a broad range of cross-sector stakeholders (consumers, health professionals including primary care providers and policy makers). Also this must include implementation targeting practitioner behaviour change, system adaptation and evidence uptake. In turn this requires dedicated funding, implementation research and active evaluation. Much of this systematic approach known as the "knowledge to action cycle" has been pioneered in Canada, where genuine cultural change has/is occurring (figure 1). Whilst the drug development translation pipeline is defined, the translation pipeline for non-pharmacological public health, lifestyle or health services interventions is not well defined and poorly funded currently. In this setting a streamlined systematic approach to drive knowledge into action is fundamental to improving health outcomes (figure 1). This will

require cultural change in end users, researchers and a change in funding approaches for medical research.

These changes are vital so that Australia can look forward to better returns on research investments, clinicians can look forward to being better informed about current evidence and Australians to better health outcomes.

1 The knowledge to action cycle from needs and priorities, through to improved health outcomes.



I hope these high level insights are of some use to the strategic review process and I am happy to elaborate further in the future.

Yours sincerely

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